PATENT

INSTITUT FRANCAIS DU PETROLE

EU-1 ZEOLITE CATALYST AND A PROCESS FOR IMPROVING THE POUR POINT OF FEEDS CONTAINING PARAFFINS

Eric BENAZZI, Nathalie GEORGE-MARCHAL, Christophe GUERET, Patrick BRIOT, Alain BILLON and Pierre MARION

ABSTRACT

The invention concerns a process for improving the pour point of a feed comprising paraffins containing more than 10 carbon atoms, in which process the feed to be treated is brought into contact with a catalyst comprising an EU-1 zeolite and at least one hydro-dehydrogenating element, at a temperature which is in the range 170°C to 500°C, a pressure in the range 1 to 250 bar and an hourly space velocity in the range 0.05 to 100 h^{-1}, in the presence of hydrogen in a proportion of 50 to 2000 l/l of feed. The oils obtained have good pour points and high viscosity indices (VI). The process is also applicable to gas oils and other feeds requiring a reduction of pour point. The invention also concerns an EU-1 zeolite from which a portion of elements T (Al, Ga, Fe or B) have been removed and which has an Si/T atomic ratio of at least 10.